Claims

1. A process for the isolation and/or purification of a proteinaceous material comprising the steps:
   (a) providing an aqueous sample comprising a proteinaceous material,
   (b) contacting the aqueous sample with a solid phase comprising a mixture of hydrophobic groups and hydrophilic groups on at least one surface thereof, wherein said proteinaceous material binds to said at least one surface, and
   (c) separating off other sample components.

2. The process according to claim 1, wherein the solid phase comprises solid particles.

3. The process according to claim 1 or 2, wherein the solid phase comprises solid particles having a diameter from $\geq$ 1 nm to $\leq$ 10 mm.

4. The process according to claim 2 or 3, wherein said particles are magnetic.

5. The process of claim 4, whereinthe particles are paramagnetic or/and ferromagnetic.

6. The process according to any of claims 1 to 5, wherein the hydrophobic groups are selected from alkyl groups or/and aryl groups.

7. The process according to claim 6, wherein the alkyl groups are selected from C_8 alkyl, C_{18} alkyl and mixtures thereof.

8. The process according to any of claims 1 to 7, wherein the hydrophilic groups are hydroxyl groups.

9. The process according to any of the preceding claims, wherein the molar ratio of hydrophobic to hydrophilic groups is from 10:1 to 1:10.

10. The process according to any of the preceding claims, wherein step (c) is performed by magnetic means.

11. The process according to any of the preceding claims, wherein the solid phase having proteinaceous material bound thereto is subjected to at least one washing step.

12. The process according to any of the preceding claims, further comprising the step

(d) eluting the proteinaceous material from the solid phase.

13. The process according to claim 12, wherein after elution the proteinaceous material and the solid phase are separated using magnetic means.

14. The process according to any of the preceding claims, wherein the isolated and/or purified proteinaceous material is analyzed by mass spectrometry.

15. The process according to any of the preceding claims, wherein at least one process step is automated.